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March 1, 2002

VIA HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services
CC Docket No. 01-337

Dear Mr. Caton:

Enclosed for filing please find an original and four copies of Comments of Verizon, in the above captioned matter.

An additional copy is enclosed to be date-stamped and returned to us in the enclosed self-addressed, stamped envelope.

Thank you for your assistance in this matter.

Very truly yours,

J.C. Rozendaal

Enclosures

044

Before the
Federal Communications Commission
Washington, D.C.

In the Matter of	)	
Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services	)	CC Docket No. 01-337

COMMENTS OF VERIZON

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COMMENTS OF VERIZON[1]

Introduction and Summary

Under no conceivable analysis could incumbent local exchange carriers ("LECs") be considered dominant in their provision of broadband services. The so-called incumbent LECs are *not* incumbents in the broadband market. They are newcomers trying to compete against well-financed, entrenched competitors – cable companies in the mass-market segment and large interexchange carriers ("IXCs") in the larger business segment – who not only enjoy commanding market shares but also are free from most or all of the strictures of common-carrier regulation. So far, the broadband marketplace has been developing in a competitive manner, with multiple providers using multiple platforms to reach customers.

In order for the market to continue to develop competitively, however, large new investments will be needed. In particular, large new investments will be needed on the part of local telephone companies to upgrade their existing networks to expand the number of customers who can be addressed by copper-based Digital Subscriber Line

[1] The Verizon telephone companies ("Verizon") are the local exchange carriers affiliated with Verizon Communications Inc. listed in Exhibit E.

technology and next-generation fiber-optic technology. Cable modem service accounts for some 70 percent of mass-market broadband services. Although satellite and wireless platforms also are potentially significant competitors, their current market shares are small. The main counterweight to cable at present comes from the local telephone companies' wireline platform. And in order to ensure that this important counterweight continues to keep competition alive and well, it is critical that local telephone companies be freed from the existing regulatory disincentives to investment and further deployment.

Dominant-carrier regulation of incumbent local telephone companies is precisely the sort of regulatory disincentive to new investment that hinders deployment of new facilities and reduces the competitive pressure on other providers like cable companies. By regulating local telephone companies as dominant carriers, the Commission risks turning today's competitive marketplace into one controlled by a few large cable companies and IXCs. By declaring local telephone companies to be non-dominant and deregulating them accordingly, however, the Commission would foster competition and encourage wider broadband deployment. A declaration of non-dominance is fully justified because local telephone companies utterly lack market power in any relevant broadband market. They have small market shares both in the mass-market and larger business segments, and they do not control access to any bottleneck facilities for broadband.

In view of the early stage of development of the broadband market and the healthy degree of competition the market exhibits, the easiest and most logical way to eliminate counterproductive regulatory disincentives to investment would be to declare that broadband facilities and services fall under Title I of the Communications Act

regardless of who provides them. This is the surest method of preventing narrowband voice rules from being applied inappropriately to the broadband data world, and it will be addressed in the upcoming *Broadband Classification* proceeding.

Even if the Commission ultimately were to classify some broadband services or facilities as subject to Title II regulation, however, it can and should remove regulatory impediments to broadband investment and deployment. On the retail side of the business, the Commission should cease to require local telephone companies to file tariffs for their own broadband services and should forbear from requiring rates to be set based on cost-plus regulation or as measured against traditional telephone benchmarks. Instead, the Commission should allow all providers to experiment with different and innovative pricing schemes such as those that prevail in the cable industry and on the Internet. And given the lack of market power on the part of local telephone companies, the Commission should rely on competition in the market to ensure that rates are reasonable.

Relatedly, given local telephone companies' lack of market power in the broadband market, the Commission should decline to apply to these non-dominant carriers the unbundling and other obligations imposed by its *Computer Inquiries* orders. Those requirements were all based on the premise that local telephone companies possessed market power in the traditional voice business. But that premise surely does not apply in the broadband context where the local telephone companies do not even arguably control a bottleneck and do not possess market power.

Finally, on the wholesale side of the business, the Commission should decline to impose collocation and unbundling requirements for broadband facilities and services. Although the unbundling issues are to be addressed in the *UNE Triennial Review*

proceeding, the Commission should make clear in this proceeding that collocation of broadband equipment at remote terminals is not required.

The Commission should at long last level the regulatory playing field in the broadband market, unleash competition, and eliminate obstacles to investment and deployment. Declaring local telephone companies to be non-dominant in their provision of broadband would be a first major step toward achieving those objectives and bringing high-quality broadband to all Americans.

* * *

The following comments draw upon and incorporate four items that are attached as exhibits. Exhibit A is a fact report ("*Broadband Fact Report*") describing in detail the state of broadband network deployment and the trends affecting the market. In Exhibit B, economists Dennis Carlton and Hal Sider confirm that local telephone companies lack market power in any relevant broadband market. In Exhibit C, economists Alfred Kahn and Timothy Tardiff explain why the application of narrowband voice regulations to broadband data services is counterproductive and inhibits effective competition in the broadband market. In Exhibit D, Verizon employee Jeff Bolton provides information on the marketing of broadband services to larger business customers. In addition, Exhibit E is a list of the Verizon Telephone Companies.

Discussion

I. Dominant Carrier Regulation of Carriers Without Market Power Inhibits Investment in Broadband Facilities and Services

Dominant carrier regulations increase the local telephone companies' costs, magnify the risk of new investments, and deny them the flexibility to enter into innovative marketing and pricing arrangements that would better serve consumers and provide an opportunity to recover investments. By contrast, despite controlling some 70 percent of the broadband mass market, cable operators are not even regulated as common carriers, much less dominant carriers. Unlike local telephone companies, other players in the market (including satellite and terrestrial wireless providers) may price their services as they choose, without having to file tariffs, and they are under no obligation to make their services or facilities available to competitors at prescribed rates.

This disparity in regulation is not simply unfair; it affirmatively harms competition. The "incumbent" local telephone companies are new entrants into the broadband market, and they face formidable competition from entrenched players who currently control a sizeable majority of the market – cable modem operators in the mass-market segment and IXCs in the larger business segment. Significant additional investments are needed if local telephone companies are to compete effectively with the incumbents in these market segments. For example, a recent analysis by JP Morgan suggests that, *given current limits on addressability* (based on current deployment levels), DSL's "natural" market share is only about one-third of the mass-market segment.[2] This means that, if one assumes that cable modem and DSL service is split evenly between

[2] Jason B. Bazinet, J.P. Morgan Securities, Inc., *The Cable Industry*, at 12 & Fig. 12 (Nov. 2, 2001) ("*JP Morgan Cable Industry Report*").

those U.S. households that have a choice between the two technologies, then cable can still be expected to capture two-thirds of the market because it is available in more places. New investment to push fiber further out into the local telephone companies' networks can improve DSL's addressability, thus expanding the number of customers who have a choice between DSL and cable and improving the overall degree of competition in the market. And, of course, still further investments will be needed to develop and deploy future generations of broadband technologies.

But the current regulatory environment discourages the very investment that is needed. In a recent letter to Chairman Powell, for instance, Verizon explained that "one of the key reasons that Verizon to this point has significantly constrained deployment of DSL capability in [its] remote terminals" is the uncertainty regarding whether line cards in remote terminals that can be used jointly for voice and broadband DSL services would have to be unbundled, and whether collocation of other providers' line cards at the remote terminals would be required.[3] Ending that uncertainty is one example of the steps the Commission can and should take in these proceedings to remove artificial obstacles to investment created by dominant-carrier regulation. The regulation-induced delay in broadband deployment comes at enormous social cost. One recent study estimated the economic and consumer benefits of widespread broadband deployment at up to $500 billion *each year*.[4]

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[3] Letter from Thomas J. Tauke and Michael E. Glover, Verizon, to Michael Powell, Chairman, FCC, CC Docket No. 96-98, at 4 (Nov. 6, 2001).

[4] Robert W. Crandall & Charles L. Jackson, Criterion Economics, L.L.C., *The $500 Billion Opportunity: The Potential Economic Benefit of Widespread Diffusion of Broadband Internet Access* (July 2001). This study was placed in the public record as Exhibit A to comments that Verizon recently filed with the National Telecommunications and Information Administration. *See* Comments of Verizon, *Request for Comments on*

Dominant-carrier regulation undermines the local telephone companies' incentives not only to expand their current broadband offerings but also to invest in new technologies, such as fiber-based services, which have the potential to increase transmission speeds and reduce costs. Although DSL provides a competitive way for telephone companies to enter the broadband business, it is not an end-state technology.[5] Because tomorrow's broadband networks will look very little like today's, and because truly mammoth investments will be needed to build those networks, it is vitally important that the Commission eliminate artificial disincentives to investment through that result from applying to broadband the regulatory constraints designed for traditional voice services.

This does not mean that Verizon intends to adopt a closed network like many of its cable competitors. On the contrary, Verizon believes there can be significant value in maintaining a wholesale business that allows other broadband service providers to reach their customers over Verizon's network. Verizon will incur huge fixed costs updating its network. The more traffic there is on the network, the easier it is to recover those costs – provided that Verizon is permitted to negotiate commercially reasonable, market-based rates with others who use the network. Accordingly, Verizon has suggested it would be willing, on commercially reasonable terms, not only to allow network access to Internet service providers not affiliated with Verizon but also to offer service at its central offices to other carriers so that they could reach their customers over Verizon's network. There is therefore no need for the Commission to impose a regulatorily prescribed "open-

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Deployment of Broadband Networks and Advanced Telecommunications, Docket No. 011109273-1273-01 (NTIA filed Dec. 19, 2001).

[5] *Broadband Fact Report* at 2, 15.

access" requirement on the network. Verizon's network will be open based on business considerations even without such a requirement, and there is no basis to impose such a requirement on local telephone companies when no such requirement applies to their competitors.

The effect of the current asymmetric regulatory tax on local telephone companies is to slow the development of the broadband market as a whole and to preserve artificially the strong market positions of cable operators and IXCs. Consequently, a marketplace that is now competitive can be expected to become less so, as the market shares of these already predominant players continue to increase at the expense of local telephone companies, which provide most of the competition today. Perversely, regulations that were designed to spur competition in the narrowband market will have precisely the opposite effect in the broadband market and will enhance the ability of cable companies and IXCs to exercise market power that a less heavily regulated market might otherwise erode over time. In contrast, if the Commission would level the regulatory playing field by loosening the regulatory shackles on the local telephone companies, it could create a virtuous circle of innovation and improved service as competitors invest to try to make their respective offerings more attractive to consumers. This loosening is justified because, as discussed below, local telephone companies utterly lack market power in any relevant broadband market.

II. Incumbent Local Telephone Companies Lack Market Power in Any Relevant Broadband Market

The broadband product market is clearly distinct from the narrowband market and, for analytical purposes, the broadband market can be divided into two market segments: the mass-market segment and the larger business segment. Both segments

exhibit healthy, facilities-based competition that makes it impossible for local telephone companies either to exercise or to acquire market power. Local telephone companies are new entrants who have small minority shares and do not control access to bottleneck facilities. As such, local telephone companies clearly are not dominant in the provision of broadband services.

A. Broadband Constitutes a Product Market Distinct from Narrowband

"Broadband," "advanced services," and various other terms have been used to refer to services that transfer data faster than standard dial-up modem technology (so-called "narrowband" technology).[6] Currently, the Commission's working definition for broadband requires speeds of 200 kbps in each direction.[7] This definition may inadvertently exclude, however, some data services provided via new technologies that may be accessible at lower speeds. The Commission should expand its definition to cover these new services in order to eliminate regulatory obstacles to the development and deployment of such new technologies.

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[6] "Narrowband" services, or "dial-up" services, are provided over modems that connect computers to the Internet over traditional telephone lines, which currently allow the transfer of data at speeds of up to 56 kbps. *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner, Inc. and American Online, Inc., Transferors, to AOL Time Warner Inc., Transferee*, Memorandum Opinion and Order, 16 FCC Rcd 6547, 6551, ¶ 8 n.11 (2001) ("*AOL-Time Warner Merger Order*").

[7] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Report*, 14 FCC Rcd 2398, 2406-07, ¶¶ 20, 22 (1999) ("*First Advanced Services Report*"); *see also Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Third Report, CC Docket No. 98-146, FCC 02-33 (rel. Feb. 6, 2002) ("*Third Advanced Services Report*").

Verizon proposes the following working definition of broadband for use in these proceedings: A broadband service is *either* a service that uses a packet-switched or successor technology, *or* a service that includes the capability of transmitting information that is generally not less than 200 kbps in both directions.[8] Examples include Digital Subscriber Line ("DSL") services, Frame Relay services, Asynchronous Transfer Mode ("ATM") services, and optical services.

Broadband services constitute a separate and distinct product market from narrowband services.[9] Every government agency to have considered the question has agreed on that issue. For example, in reviewing the AOL-Time Warner merger, both the FCC and the FTC recognized the distinctiveness of broadband.[10] The Department of Justice did likewise when reviewing the AT&T-MediaOne merger.[11] There is no mystery to this distinction. Broadband allows consumers to do many bandwidth-intensive activities that they cannot readily do over narrowband, including – to name just a few – downloading movies and music, telecommuting, online gaming, streaming video, and

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[8] This definition does not include (1) traditional non-packet-switched data services, such as 56 kbps and 1.5 Mbps services, (2) lower-speed data services that are based on circuit technology, such as ISDN, (3) x.25-based and x.75-based packet technologies, or (4) circuit switched services (such as circuit-switched voice-grade service) regardless of the technology, protocols, or speeds used for the transmission of such services.

[9] Declaration of Dennis W. Carlton & Hal S. Sider ¶¶ 16-17 (attached as Exhibit B hereto) ("Carlton/Sider Decl."); *see also* Declaration of Robert W. Crandall & J. Gregory Sidak ¶ 33 n.34 (attached to SBC Petition for Expedited Ruling That It Is Non-Dominant in Its Provision of Advanced Services and for Forbearance from Dominant Carrier Regulations of Those Services (FCC filed Oct. 3, 2001)) ("Crandall/Sidak Decl.")

[10] *AOL-Time Warner Merger Order*, 16 FCC Rcd at 6571-72, ¶ 63; Federal Trade Commission Complaint, *American Online, Inc. and Time Warner Inc.*, FTC Docket No. C-3989, ¶ 21 (FTC filed Dec. 14, 2000) ("FTC AOL-Time Warner Complaint").

distance learning. Demand for broadband (as distinct from narrowband) services will increase in the future as additional broadband-dependent applications emerge.[12] Furthermore, there is a significant price differential between narrowband and broadband service offerings, and changing from narrowband to broadband involves upgrading costs like new equipment and installation charges. Accordingly, the Commission should continue to regard broadband services as constituting a separate product market. Nevertheless, narrowband connections provide access to the Internet, e-mail, instant text messaging, and the like, thus ensuring a basic level of data connectivity to persons who live in areas where broadband has not yet been deployed.

Consistent with Commission precedent and as suggested in the SBC Non-Dominance Petition,[13] the broadband market may be divided into two submarkets: the mass-market segment (consisting chiefly of residential and small business users) and the larger business market segment (consisting chiefly of medium and large business users).[14] Larger businesses typically demand different types of services at higher price points than do mass market users. Services marketed chiefly to larger business customers include

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[11] Department of Justice, Antitrust Division, Competitive Impact Statement, *United States v. AT&T Corp. and MediaOne Group, Inc.*, No. 00-1176 (D.D.C. filed May 25, 2000), *available at* http://www.usdoj.gov/atr/cases/f4800/4842.htm.

[12] *Broadband Fact Report* at 22 & n.100.

[13] SBC Petition for Expedited Ruling That It Is Non-Dominant in Its Provision of Advanced Services and for Forbearance from Dominant Carrier Regulation of Those Services (FCC filed Oct. 3, 2001).

[14] *See Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, Notice of Proposed Rulemaking, CC Docket No. 01-337, FCC 01-360, ¶ 20 & n.46 (rel. Dec. 20, 2001) ("*ILEC Broadband NPRM*").

Frame Relay, ATM, and Gigabit Ethernet,[15] while mass market users are more likely to demand DSL or cable modem service.

Mass-market services are generally advertised directly to the end user and purchased over the telephone or by electronic inquiry. Mass-market customers choose from a limited set of generic high-speed data offerings due to the daily volume of orders and the need rapidly to provision the service to the end user. By contrast, larger business customers have very specific requirements in terms of geographic locations, service mix, customer interface specifications, and the need for network diversity. Engagement with the large business customer (for services such as Frame Relay, ATM, and Gigabit Ethernet) is often initiated through requests-for-proposal (or other bid methods) for particular network designs, as opposed to mass-market advertising. In short, larger business customers require a more customized approach than mass-market customers.[16]

One unifying characteristic of all these broadband services is that local telephone companies have no historical facilities bottleneck and instead are deploying these services for the first time – just as others can do and are doing. Indeed, as discussed in the attached *Broadband Fact Report*, cable companies, satellite companies, terrestrial wireless companies, and even competitive wireline companies are all building new broadband facilities.[17]

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[15] *Broadband Fact Report* at 25-26.

[16] Declaration of Jeff Bolton ¶¶ 4, 6, 8-9 ("Bolton Decl.") (attached as Exhibit D hereto).

[17] *Broadband Fact Report* at 1-3.

B. Mass-Market Segment

1. Mass-Market Customers Can Choose from Four Competing Platforms, but the Cable Platform Predominates at Present

Currently, four main technologies are being used to provide broadband services to mass-market consumers: cable modem, DSL, satellite, and fixed terrestrial wireless.[18] While these technologies overlap and compete today, cable companies are the dominant incumbents in mass-market broadband, with existing broadband-capable infrastructure reaching nearly two-thirds of U.S. homes.[19] DSL lags behind, reaching only about 40 percent of U.S. homes last year.[20] As of September 2001, there were 6.2 million cable modem subscribers in the U.S., compared to 2.8 million residential DSL subscribers.[21] Importantly, cable not only has a large lead over other broadband technologies, but it also continues to add new subscribers at a faster rate.[22] Over the past year, cable has increased its market share of new subscriber additions. Even before cable operators began this latest growth spurt, the Commission predicted that cable operators would continue to serve the majority of residential broadband customers until at least 2004,[23]

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[18] Other technologies, not yet widely available, may be used to deliver broadband in the future, including Fiber To The Home ("FTTH").

[19] *Broadband Fact Report* at 4 & n.5

[20] *Broadband Fact Report* at 5 & n.13.

[21] *Broadband Fact Report* at 1.

[22] *Id.* at 1.

[23] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Second Report, 15 FCC Rcd 20913, 20985, ¶ 189 (2000) ("*Second Advanced Services Report*") ("Many analysts expect that over the next five years, cable modem subscriptions will continue to increase dramatically, reaching an average estimate of 15.2 million subscribers by year-end 2004."); *id.* at 20986, ¶ 191 ("Many analysts predict that, over the next five years, residential DSL subscription will grow to 13 million.").

and industry analysts expect cable to maintain a considerable lead over DSL and other broadband technologies for the foreseeable future.[24]

Although both two-way satellite and fixed wireless are new technologies with very small market shares at present, they are expected to grow rapidly and take share from cable modem and DSL operators in the coming years.[25] According to one report, "[t]wo-way satellite broadband Internet access will be the fastest growing single-access technology. . . . This rapid growth will reflect the introduction and aggressive marketing of several high-profile satellite Internet services to the residential market during the 2002 to 2004 period, as well as the continued expansion of the installed base of satellite dishes in U.S. households for satellite TV broadcast services such as DirecTV."[26] WorldCom recently announced that it would begin offering "two-way broadband access to business customers throughout the continental U.S."[27] As far as terrestrial wireless services are concerned, in addition to the already-licensed MMDS and LMDS services, the Commission recently authorized the creation of a new Multipoint Video and Data Distribution Service ("MVDDS"), which will be licensed to share the 12.2-12.7 GHz band with DBS and other satellite operators.[28]

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[24] *Broadband Fact Report* at 12.

[25] *Id.* at 8.

[26] Business Communications Co., *Market for Broadband Internet Access Continues to Soar*, Broadband Opportunities: A Mini Series (Nov. 1, 2001).

[27] Press Release, *WorldCom Lauches New Internet Access Services: Two-Way Satellite, Gigabit Ethernet and OC-48 Services Offer more Accessibility, Speed and Reliability to Businesses Nationwide*, at http://biz.yahoo.com/prnews/011127/hstu026_1.html.

[28] *See generally Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range*, First Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 4096 (2000).

Competition in the broadband mass-market segment is robust, despite the cable modem operators' head start. The Commission has noted with approval "a continuing increase in consumer broadband choices within and among the various delivery technologies," which indicates that "no group of firms or technology will likely be able to dominate the provision of broadband services."[29] Each of the four main delivery technologies competes head to head with the others in a single broadband mass market.[30] All four are functionally similar: they all provide Internet access at comparable speeds.[31] In addition, as the Commission has previously recognized, broadband services using different technologies are available at similar prices.[32]

Equally significant, the service providers clearly, and appropriately, view one another as direct competitors. Time Warner and AOL have touted the "significant actual

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[29] *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, Third Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 11857, 11864-65, ¶¶ 17, 19 (2000); *see also, e.g., Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor, to AT&T Corp., Transferee*, Memorandum Opinion and Order, 15 FCC Rcd 9816, 9866 ¶ 116 (2000) (finding that cable operators, despite having a commanding share of the broadband market, face "significant actual and potential competition from . . . alternative broadband providers").

[30] *See* Carlton/Sider Decl. ¶¶ 14-15.

[31] Also, unlike most narrowband technologies, the four main consumer broadband technologies allow customers to connect to the Internet without tying up their traditional voice telephone lines.

[32] *Broadband Fact Report* at 9-10. Two-way satellite services, which have been commercially available for about a year, are somewhat more expensive than cable modem, DSL, or fixed wireless services at present – *i.e.*, they cost about $70 per month rather than $35-$50. But broadband satellite prices have already begun to decline and are expected to decline further in the near future. Moreover, as with cable providers, the equipment needed for broadband satellite may also be used for video service, which provides added value that must be factored into any straight comparison. And some

and potential competition affording consumers adequate choice across existing and emerging [broadband] platforms."[33] The recent refusal of cable companies to sell advertising time to telephone companies seeking to promote DSL service confirms that cable modem providers perceive DSL providers to be their direct competitors.[34] For its part, Verizon views cable modem operators as the main competitors to its DSL offerings.

Moreover, consumers view the technologies as interchangeable. Recent survey results confirm the opinions of industry analysts who describe mass-market broadband consumers as "platform agnostic."[35] Earthlink CEO Garry Betty recently confirmed that "[c]ustomers don't care if its cable or D.S.L."[36] In essence, consumers want broadband functionality, and they do not care what kind of hardware or software is used to implement that functionality. Because both consumers and suppliers view the competing

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satellite providers have begun offering special discounts to customers that purchase both video and Internet access services. *See id.* at 10.

[33] Reply of America Online, Inc. and Time Warner Inc., *Applications of America Online, Inc. and Time Warner Inc. for Transfers of Control*, CS Docket No. 00-30, at 16 (FCC filed May 11, 2000).

[34] Seth Schiesel, *Cable Giants Block Rival Ads in Battle for Internet Customers*, N.Y. Times, June 8, 2001, at C1; Erik Wemple, *Cable Giants Hit Over ISP Ad Policies*, Cable World, June 11, 2001.

[35] *Broadband Fact Report* at 8; *see also, e.g.*, Ariana E. Cha, *Broadband's a Nice Pace If You Can Get It*, Washtech.com (Feb. 28, 2001), *at* http://www.washtech.com/news/ telecom/7902-1.html ("People don't really care whether it's cable or DSL or satellite, or a carrier pigeon for that matter, as long as they have the quality they need for a price they find affordable." (citing Lisa Pierce, Telecommunications Analyst, Giga Information Group)); Tim Greene and Denise Pappalardo, *The Last Mile Access Race is Heating Up*, Network World Fusion (Apr. 24, 2000), *at* http://www.nwfusion.com/news/2000/0424lastmile.html ("Ultimately, it won't matter to customers what the access method is so long as it's fast." (citing Nick Stanley, Analyst, Communications Industry Research)).

[36] Saul Hansell, *Demand Grows for Net Service at High Speed*, N. Y. Times, Dec. 24, 2001, at C1.

broadband technologies as interchangeable, there is no separate relevant "DSL market" that is distinct from the broader mass market for broadband services.

2. Local Telephone Companies Lack Market Power in the Mass Market Segment

The small market shares of the incumbent LECs in the broadband market belie any notion of market power. Even these low market shares tend to overstate the strength of local telephone companies in the provision of broadband, however. Market share is an inherently backward-looking measure, and market power is better evaluated by considering the extent to which competing service offerings are available in the market or likely to become available in the near term. The recent debut of two-way satellite broadband, plus the promise of significant growth in terrestrial wireless services suggest that unregulated competitive offerings are likely to increase, so that existing market shares are not especially reliable predictors of future market success. Any price increase by the telephone companies would lead to defections of DSL customers to cable modem service, satellite, and fixed wireless operators.[37]

Moreover, incumbent local telephone companies lack the ability to acquire market power by controlling access to bottleneck facilities or to any other essential input in the broadband mass market. The local telephone companies have no such control. To begin with, cable modem service, satellite service, and terrestrial wireless service all have their own pathways to the customer that do not depend in any way upon incumbent LEC facilities or other inputs. The opportunity to discriminate improperly against these intermodal competitors does not exist. And these independent competitors (which collectively have far greater market share than the incumbent LECs) in turn ensure that

[37] Carlton/Sider Decl. ¶ 22; Crandall/Sidak Decl. ¶ 66.

the telephone companies could never acquire, through illegal discrimination, the ability to raise prices or reduce output. Any attempt to do so would simply cause customers to defect to competing platforms.

Nor is there any possibility that incumbent LECs could leverage any market power from the local exchange and exchange access markets into the broadband market, either through a price squeeze or through predatory pricing.[38] Price cap regulation of incumbent LECs' narrowband voice services forecloses that possibility entirely. And, as discussed below, neither of those methods of acquiring market power is likely to be effective in the broadband market in any event.

As noted above, the leading players in the mass market segment do not use any telephone company facilities to reach their customers, so telephone companies have no opportunity to effect a price squeeze. And predatory pricing would work only if prices could be lowered enough to drive competitors from the market and keep them out long enough to recoup through excess profits what it gave up in below-cost prices.[39] Verizon and other incumbent LECs face competition from such large companies as AOL Time Warner, AT&T, Comcast, and Hughes (DirecTV), which have collectively invested billions in transmission facilities. As the Commission has already recognized, predatory pricing is ineffective once competitors have incurred the sunk cost of building such facilities: even if a particular competitor could be driven out of business by predatory

[38] Crandall/Sidak Decl. ¶¶ 84-94; Carlton/Sider Decl. ¶¶ 21-24.

[39] Crandall/Sidak Decl. ¶¶ 88-89; Carlton/Sider Decl. ¶¶ 22-23.

pricing, any attempt to raise prices afterward would simply draw entry by a new company taking over the existing facilities.[40]

In short, vigorous intermodal competition ensures that local telephone companies would have no ability to raise rivals' costs or otherwise take advantage of their position in the narrowband market to obtain market power in the broadband mass-market segment.

C. Larger Business Market Segment

1. Larger Business Customers Can Choose Among Competing Broadband Data Services

While the broadband mass-market segment is characterized by competition among multiple platforms (*e.g.*, wireline, cable), the larger business segment is generally served by high-quality, high-capacity packet-switched services provided over wireline networks. IXCs like AT&T and WorldCom enjoy a commanding lead over their LEC competitors in the larger business segment, which involves such data services as Frame Relay, ATM, and Gigabit Ethernet.[41] Yet, like the mass-market segment, the larger business segment is robustly competitive.[42]

The various business-oriented broadband data services are functionally similar: they all typically connect business LANs to one another or access the Internet at

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[40] *Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers*, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221, 14270-71, ¶ 80 (1999) ("*Pricing Flexibility Order*"). *See* Crandall/Sidak Decl. ¶¶ 89-90; Carlton/Sider Decl. ¶¶ 22-23.

[41] *Broadband Fact Report* at 27-28; among the new technologies not yet widely available to the larger business segment is Business Passive Optical Network ("BPON") technology.

[42] *Broadband Fact Report* at 25-26.

comparable speeds.[43] In addition, the various broadband services are available at similar prices.[44] And the service providers themselves recognize that the services are close substitutes. Providers typically advertise ATM as a replacement for Frame Relay, and they recognize that introducing Gigabit Ethernet will cannibalize revenues from their other packet-switched offerings.[45] Business customers likewise view the technologies as substitutes. Many do, in fact, migrate from Frame Relay to ATM, for example.[46] This close substitutability, and the distinctness of these offerings as compared with the Internet access products typically sold to mass-market consumers, makes the large business market segment analytically separate from the broadband mass-market segment.[47]

2. Local Telephone Companies Lack Market Power in the Larger Business Segment

The larger business segment has many large, well-financed companies competing head-to-head with interchangeable product offerings. Nationwide, Verizon has only about a 4.2 percent share of the Frame Relay revenues, and about a 5.6 percent share of ATM revenues – a far-from-dominant market share by any standard.[48]

Any attempt by local telephone companies to raise price or reduce output of ATM, Frame Relay, Gigabit Ethernet or other broadband service would lead customers to

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[43] *Id.* at 25-26.

[44] *Id.* at 21-22 & Table 4.

[45] D. Zito *et al.*, Lehman Brothers and McKinsey & Co., The Future of Metropolitan Area Networks at 18 (Aug. 24, 2001) ("Ethernet, notably Fast Ethernet and GigE data lines, is expected to become the leading access protocol for enterprises in the next five years. Ethernet should account for 60 percent of total bandwidth, replacing frame relay, private line, DSL and other protocols due to low-cost of services and familiarity in enterprise IT environments"); Crandall/Sidak Decl. ¶ 99.

[46] Bolton Decl. ¶4; Crandall/Sidak Decl. ¶ 98.

[47] Carlton/Sider Decl. ¶¶ 18-20; Crandall/Sidak Decl. ¶¶ 97-102.

defect to other suppliers of the same services, who have ample capacity to spare.[49] Competitors have installed more than 2,500 packet switches and more than 300,000 miles of fiber nationwide, and the number of competitive packet switches more than tripled between 1999 and 2001, indicating considerable supply elasticity.[50]

Larger businesses tend to be sophisticated purchasers of telecommunications services generally, and broadband data services in particular.[51] These buyers ensure a high level of competition among suppliers by soliciting multiple bids before awarding contracts and by extracting discounts from suppliers in exchange for longer-term contracts. Verizon estimates that 95 percent of the contracts in this segment are for terms of three years or more.[52] The existence of these long-term contracts prevents local phone companies or anyone else from rapidly gaining market share because the contracts usually are structured so as to make it uneconomic to change suppliers before the end of the contract term.[53] Moreover, because many businesses desire interLATA broadband services, local telephone companies are at a competitive disadvantage in the larger business broadband market wherever they have not received authorization to provide interLATA services pursuant to Section 271 of the Communications Act.[54]

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[48] *Broadband Fact Report* at 30 & n. 163.

[49] Carlton/Sider Decl. ¶¶ 22-24.

[50] *Broadband Fact Report* at 28-29. That there is more than enough excess fiber and switching capacity to absorb customers defecting

[51] *Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd 3271, 3306, ¶ 65 (1995) ("*AT&T Non-Dominance Order*").

[52] Bolton Decl. ¶ 9.

[53] Carlton/Sider Decl. ¶ 24.

[54] Verizon is *not*, however, requesting relief from the requirements of Section 271 for broadband services in these proceedings.

Local telephone companies also lack any scale advantages in this market segment.[55] Competitors such as AT&T, WorldCom, and Sprint are well financed and capable of offering the capacity required to service this market. Moreover, the Commission has previously noted that local telephone companies and their competitors have "relatively similar utilization rates of their packet switching capacity" so that it did "not appear that incumbent LECs possess significant economies of scale in their packet switches" as compared to their competitors.[56]

For the same reasons that local telephone companies have no ability to raise rivals' costs or to leverage their control of narrowband facilities into control of the broadband mass market segment, they have no ability to do so with respect to the larger business segment. Vigorous competition, plenty of sunk costs in excess switching and fiber capacity, and continued price-cap regulation of incumbent local telephone companies' voice services collectively foreclose any attempt by these companies to exercise or acquire what the Commission has called "Bainian" market power.

D. Relevant Geographic Market

Although the Commission has in the past identified the geographic scope of the relevant market for some broadband services as local, the relevant geographic area for the Commission's consideration in the present proceedings is national. Commission precedents strongly support this approach. As noted in the NPRM, even in some instances where the Commission has recognized many point-to-point markets, such as

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[55] *See generally* Carlton/Sider Decl. ¶ 24.

[56] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696, 3836, ¶ 308 (1999) ("*UNE Remand Order*"), *petitions for review*

for long-distance services, it has treated them all as if there were a single national geographic market because customers in the various local geographic markets face similar competitive choices.[57] Today, customers in both the mass-market segment and the larger business market segment face similar competitive choices nationwide. As described above and in the *Broadband Fact Report*, in the mass market segment, satellite broadband is available virtually everywhere in the country already, cable modem services are available to the vast majority of the U.S. population, and DSL services are available to roughly half of America's households. There is extensive geographic overlap among competitors. The vast majority of households that can receive DSL service can receive cable modem service and satellite service as well. Although terrestrial wireless services are small in scale at present, they are expected to grow rapidly in coming years.[58] The larger business market segment features competitors who operate and advertise nationally, often serving customers who do likewise.

Although for purposes of its petition for classification as non-dominant, SBC has suggested using its own service area as the relevant geographic market, there is no need for the Commission to complicate its analysis by studying each incumbent LEC's service area separately. SBC's competitive position within its service area is substantially equivalent to the incumbent LECs' collective position in the national market. All incumbent LECs so plainly lack market power that any regional variation in market share

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pending, Uunited States Telecom Ass'n v. FCC, Nos. 00-1015 & 00-1025 (D.C. Cir.). Oral argument is scheduled for March 7, 2002 ("*UNE Remand Order*").

[57] *ILEC Broadband NPRM* ¶ 27 & n.64.

[58] *Broadband Fact Report* at 6-7 & n.23.

is irrelevant.[59] Nowhere do LECs even come close to having any ability to exercise market power with respect to broadband facilities or services. The customer aggregation approach that the Commission has used to evaluate markets for long-distance is thus appropriate for the broadband as well.[60]

III. The Commission Should Adopt a Deregulatory Framework for Broadband Services in Order to Promote Deployment of Those Services

Two central goals of the 1996 Act are to promote facilities-based competition and to encourage deployment of new technologies. Indeed, the preamble to the 1996 Act describes it as an act "to promote competition and reduce regulation . . . and encourage the rapid deployment of new telecommunications technologies."[61] Section 706 of the 1996 Act commands the Commission to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans," by using, among other things, "regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to

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[59] Carlton/Sider Decl. ¶ 5 & n.3.

[60] *Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.*, Memorandum Opinion and Order, 13 FCC Rcd 18025, 18042-43, ¶¶ 30-31 (1998) ("[W]e are not persuaded that there are, or could be, materially different competitive conditions in a particular point-to-point market, or group of point-to-point markets, and therefore, treat the geographic market as a single, national market."); *Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area and Policy and Rules Concerning the Interstate, Interexchange Marketplace*, Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, 12 FCC Rcd 15756, 15793-94, ¶¶ 65-66 (1997) ("We recognize . . . that assessing market power in each individual point-to-point market would be administratively impractical and inefficient.") ("*BOC Classification Order*").

[61] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, preamble; *see also* Pub. L. No. 104-104, § 706, 110 Stat. 56, 153 (codified at 47 U.S.C. § 157 note) (requiring Commission to accelerate deployment of advanced telecommunications capability "by removing barriers to infrastructure investment and by promoting competition in the telecommunications market").